Docket No. 740819-715

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Confirmation No.: 4540
Hideaki ITO et al.	)	
Application No.: 10/018,369	)	Examiner: John M. Hoffman
Filed: December 19, 2001	)	Group Art Unit: 1731
For: METHOD FOR MANUFACTURING AN OPTICAL FIBER PREFORM	)	
	)	Date: December 8, 2006

REQUEST FOR RECONSIDERATION

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated August 8, 2006, Applicants respectfully request reconsideration and withdrawal of the rejection of the claims.

In the most recent Office Action, claims 8 and 10 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. In setting forth the rejection, the Examiner asserts that there is no support, either explicit or implicit for the limitation that the feed rate of the glass pipe is faster than that of the glass rod. This rejection is respectfully traversed, for the reasons advanced below.

Before proceeding, the Examiner's attention is directed to inadvertent typographical errors discovered upon Applicants' review of the response of November 18, 2005. First, the ratio of the cross section area of the pre-unified glass rod to the cross section area of the pre-unified glass pipe, as set forth in equation (1) on page 7 of the response, should have been stated as follows:

> (cross section area of the pre-unified glass rod) / (cross section area of the pre-unified glass pipe) = $(\pi*d^2/4) / (\pi*D0^2/4 - \pi*d0^2/4) = d^2 / (D0^2 - d0^2)$ … (1).

Second, the Table on page 8 of the November 18, 2005, response includes two typographical errors with respect to values of equation (2) (i.e., "Value of Eq. (2)") for Examples 3 and 5. Corrections are made in the following Table A (the previously named "Table" is now labeled "Table A" to distinguish it from "Table B," below):

Table A

	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Ex. 5	Ex. 8	Ex. 12	Ex. 14
Value of Eq. (1)	0.0978	0.0912	0.0912	0.0912	0.0912	0.0825	0.114	0.0966
Value of Eq. (2)	0.0885	0.0836	0.0833	0.0833	0.0837	0.0728	0.0998	0.0882
Difference between Eq. (1) & Eq. (2)	0.009	0.008	0.008	0.008	0.008	0.007	0.012	0.008

Applicants regret any inconvenience or confusion these errors may have caused.

Returning now to the rejection, the Examiner states that the ratio is calculated when using d2 and D2 instead of d1 and D1. When d2 and D2 are used, the equation should be shown as follows:

$(\pi*d2^2/4) / (\pi*D2^2/4 - \pi*d2^2/4) = d2^2 / (D2^2 - d2^2)$

Using the values each recited in Examples 1-5, 8, 12 and 14 of Figs. 4 and 5, the values of the above ratio are shown as follows (for the Examiner's reference, the values mentioned in the remarks filed on November 18, 2005, as corrected above, also are shown):

Table B

	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Ex. 5	Ex. 8	Ex. 12	Ex. 14
Value using d2/D2	0.0900	0.0833	0.0833	0.0833	0.0833	0.0729	0.0998	0.0880
Value using d1/D1 (Value of Eq. (2))	0.0885	0.0836	0.0833	0.0833	0.0837	0.0728	0.0998	0.0882
Value using d/d0/D0 (Value of Eq. (1))	0.0978	0.0912	0.0912	0.0912	0.0912	0.0825	0.114	0.0966

According to Table B, the ratio using d1 and D1 and the ratio using d2 and D2 have the same value, substantially. As the Examiner recognizes, the d1 and D1 measurements occur in mid-process, and it might be impossible that the pipe or the rod might be stretched at different rates after the d1/D1 location. Hence, the ratio using d1 and D1 and the ratio using d2 and D2 may have the same, or substantially the same value, as indicated above.

However, when comparing the ratio using d, d0 and D0 with the ratio using d2 and D2, it is found that the value of the ratio using d, d0 and D0 is <u>larger</u> than that of the ratio using d2 and D2 (in Table B, compare the values of the bottom row with those of the top row), which agrees with Applicants remarks of the November 18, 2005, response. More

specifically, that the magnitude relationship between the feed rate of the glass pipe and that of the glass rod refers to a magnitude relationship between the ratio of the cross section area of the pre-unified glass pipe to that of the pre-unified glass rod and the ratio of the cross section area of the unified glass pipe to that of the unified glass rod (see, page 7, lines 12-15).

As the Examiner can appreciate, the ratio of the cross section area of the pre-unified glass pipe to that of the pre-unified glass rod is obtained from d, d0 and D0, while the ratio of the cross section area of the unified glass pipe to that of the unified glass rod is obtained from d1 and D1, or d2 and D2. As shown in Table B, that the ratio of the cross section area of the pre-unified glass pipe to that of the pre-unified glass rod has a value larger than the ratio of the cross section area of the unified glass pipe to that of the unified glass rod. In other words, the feed rate of the glass pipe is larger than that of the glass rod.

On page 3 of the Action, the Examiner asserts that "when using d2 and D2 Examiner again finds the ratios are the same and the feed rates are the same" (see, item 5) in the "Response to Arguments" section). However, it is unclear which ratio he is compared with the ratio using d2 and D2. Clarification in this regard is requested.

As pointed out above, the ratio using d1 and D1 and the ratio using d2 and D2 have substantially the same value because they both correspond to a unified ratio. On the other hand, the ratio obtained by using d and D0 and the ratio obtained by using d2 and D2 do not have the same value. Comparison of the cross section areas should be carried out by a comparison of a pre-unified ratio with a unified ratio.

For at least these reasons, Applicants respectfully submit that they had in their possession, at the time the invention was filed, the claimed subject matter.

Based on the forgoing, the present application is believed to be in condition for allowance. Prompt notification of the same is earnestly sought.

Respectfully submitted,

/John F. Guay, Reg.# 47248/
John F. Guay

NIXON PEABODY LLP
401 9th Street, N.W., Suite 900
Washington, D.C. 20004-212
(202) 585-8298 (direct)